SYSTEM AND METHODS FOR ENHANCING THE EXPERIENCE OF SPECTATORS ATTENDING A LIVE SPORTING EVENT, WITH GAMING CAPABILITY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit under 35 USC 119(e) of: U.S. Provisional Patent Application No. 60/701, 473 filed on Jul. 22, 2005 by Jean Arseneau et al. and hereby incorporated by reference herein; U.S. Provisional Patent Application No. 60/778,363 filed on Mar. 3, 2006 by Jean Arseneau et al. and hereby incorporated by reference herein; and U.S. Provisional Patent Application No. 60/789,911 filed on Apr. 7, 2006 by Jean Arseneau and hereby incorporated by reference herein.

FIELD OF THE INVENTION

[0002] Broadly stated the invention relates to a system allowing wireless distribution of event-related video and/or audio content. The invention also extends to individual components of the system and associated methods of operation and use.

BACKGROUND OF THE INVENTION

[0003] The concept of delivering video and/or audio content to spectators attending a live sporting event is known. The typical approach uses a local transmission station that will deliver video and/or audio content over the air to handheld electronic devices operated by individual spectators. A spectator can select the particular video/audio stream of interest on the handheld electronic device.

- SUMMARY OF THE INVENTION As embodied and broadly described herein the invention provides a handheld electronic device for use at a venue hosting a live sporting event, comprising:
- [0004] a) a receiver for receiving a wireless RF transmission conveying:
 - [0005] i) a plurality of video streams conveying live sporting event content, the live sporting event content including moving images of action occurring at the live sporting event held at the venue;
 - [0006] ii) physiological data associated with a player involved in the live sporting event held at the venue.
- [0007] b) a display;
- [0008] c) a user interface for selecting a video stream among the plurality of video streams to be displayed on the display;
- [0009] d) the handheld electronic device capable of processing the physiological data for displaying physiological information associated with the player on the display.
- [0010] As embodied and broadly described herein the invention provides a data structure embedded in a wireless RF transmission, the wireless RF transmission being intended for reception by a plurality of handheld electronic devices at a venue hosting a live sporting event, the data structure comprising:

- [0011] a) a plurality of video streams for display at handheld electronic devices, the plurality of video streams conveying live sporting event content, the live sporting event content including moving images of action occurring at the live sporting event held at the venue;
- [0012] b) physiological data associated with a player involved in the live sporting event held at the venue.
- [0013] As embodied and broadly described herein the invention provides a handheld electronic device for use at a venue hosting a live sporting event, comprising:
 - [0014] a) a receiver for receiving a wireless RF transmission conveying:
 - [0015] i) a plurality of video streams conveying live sporting event content, the live sporting event content including moving images of action occurring at the live sporting event held at the venue;
 - [0016] ii) video game data;
 - [0017] b) a display;
 - [0018] c) a user interface for selecting a video stream among the plurality of video streams to be displayed on the display;
 - [0019] d) the handheld electronic device capable of processing the video game data for allowing the spectator to play a video game on the display.
- [0020] As embodied and broadly described herein the invention provides a data structure embedded in a wireless RF transmission, the wireless RF transmission being intended for reception by a plurality of handheld electronic devices, the data structure comprising:
 - [0021] a) a plurality of video streams for viewing at the handheld electronic devices, the plurality of video streams conveying live sporting event content, the live sporting event content including moving images of action occurring at the live sporting event held at the venue;
 - [0022] b) video game data for execution by the handheld electronic devices allowing users of the handheld electronic devices to play a video game on displays of the respective handheld electronic devices.
- [0023] As embodied and broadly described herein the invention provides a process for enhancing the experience of spectators attending a live sporting event held at a venue, the process comprising:
 - [0024] a) producing while the live sporting event is ongoing a wireless RF transmission including a plurality of video streams conveying live sporting event content, the live sporting event content including moving images of action occurring at the live sporting event held at the venue, the wireless RF transmission being intended for reception by handheld electronic devices of respective spectators at the venue, each handheld electronic device:
 - [0025] i) including a display allowing the respective spectator to view the video streams;